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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/620,523	07/20/2000	Bruce E. Novich	1596C5	2899

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EXAMINER

GRAY, JILL M

ART UNIT	PAPER NUMBER
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1774

DATE MAILED: 07/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/620,523

Applicant(s)

NOVICH ET AL.

Examiner

Jill M. Gray

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 April 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3-40 and 42-58 is/are pending in the application.
- 4a) Of the above claim(s) 4,6-11,21-39 and 48-58 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,13-20,40 and 42-47 is/are rejected.
- 7) ☒ Claim(s) 5 and 12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Response to Amendment

The rejection of claims 1, 3, 5, 16-17, 40, 42, 45, and 46 under 35 U.S.C. 102(b) as being anticipated by Stengle, Jr. 4,316,930 is withdrawn in view of applicants arguments.

The rejection of claims 13, 18, and 47 under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Stengle, Jr. 4,316,930 is withdrawn in view of applicants arguments.

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1, 3, 13-20, 40, and 42-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagamine, 1-249333, for reasons of record.

Nagamine teaches a laminate adapted for an electronic support and an electronic support wherein the laminate comprises a glass cloth impregnated with a resin (page 1). In addition, Nagamine teaches that the glass cloth is formed from sized filaments that have been formed into yarns and subsequently woven into cloths wherein the glass cloth still has the sizing agent adhered thereto. Nagamine teaches that in cases where the sizing agent causes a problem in the adhesion with the resin, the glass cloth can be degreased. See page 3. Moreover, Nagamine teaches that the sizing agent used for the glass yarns include a recently developed non-desizing sizing agent that does not require degreasing or surface treatment and thereby eliminates

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degreasing and improving productivity and production yield. See page 10. Nagamine additionally teaches that a size composition comprising starch powder can be applied.

See page 3. Hence, Nagamine teaches the inclusion of a plurality of particles.

Regarding the Moh's hardness of claim 13, the claims do not require glass fibers, thus the teachings of Nagamine meets this limitation. As to claims 19-20, Nagamine teaches the incorporation of resin reactive diluents in his coating composition. See page 17.

Regarding claims 16 and 45, it would have been an obvious variant to include an additional lubricious material to minimize abrasion during processing. Regarding claims 15 and 44, these claims are drawn to the size of the particles, wherein changes in size are not a matter of invention in the absence of a showing of criticality. Applicants are invited to provide such showing.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to produce a laminate and electronic support comprising a matrix material and a fabric comprising at least one strand comprising a plurality of fibers and wherein the fabric has been coated with a resin compatible coating comprising a plurality of particles. While the examples set forth in Nagamine utilize a glass cloth that has been degreased, the prior art reference is not limited solely to that which is taught in its' preferred embodiments, rather, all that the prior art reference would have reasonably imparted to one of ordinary skill in the art at the time the invention was made. In the instant case, the teachings of Nagamine would have provided direction to the skilled artisan to use as the fabric, a fabric that is sized with a sizing agent that does not require degreasing or more specifically, a non-degreased

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fabric, with the reasonable expectation of improving economic aspects of the production process and improving production yield. Regarding claims 18 and, it is the examiner's position that where the general conditions of a claim are discovered in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation.

Response to Arguments

3. Applicant's arguments, see Amendment, filed April 14, 2006, with respect to prior art rejections of Nagamine 1-249333 in view of Russian Patent Publication 2072121 (Adolfovna) and Nagamine in view of Japanese Patent Publication 4-307787 have been fully considered and are persuasive. The rejection of claims based on these combined references has been withdrawn.

4. Claims 5 and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

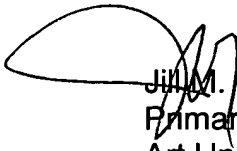
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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill M. Gray whose telephone number is 571-272-1524. The examiner can normally be reached on M-Th and alternate Fridays 10:30-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Jill M. Gray
Primary Examiner
Art Unit 1774

jmg